Sexual Health in Wales Surveillance Scheme (SWS)

Quarterly Report, October 2018 (Data to end June 2018)

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Purpose and Summary of Document:

This report presents the latest observed trends on the rates of sexually transmitted infections and other infections diagnosed in Integrated Sexual Health clinics in Wales and highlights quality issues in the data. This report compares the 6-month period January 2018 to June 2018 (Q1 2018-Q2 2018) with the same period of the previous year. Data are presented as at 16th October 2018.

Key points

- There was an increase in reports of new diagnoses of first episode of herpes, HIV and gonorrhoea across Wales over the last year, and a decrease in reports of chlamydia, syphilis, first episode of warts, hepatitis B and hepatitis C (comparing Q1 2017- Q2 2017and Q1 2018- Q2 2018) (Table 1). Please note some of these changes may be due to small numbers, and should be taken with caution. Comparing Q1 2017- Q2 2017and Q1 2018- Q2 2018:
  - Syphilis decreased by 12% from 106 to 93 cases, whilst reports of syphilis testing increased by 5% (Table 1).
  - Gonorrhoea increased by 6% whilst gonorrhoea testing increased by 6%.
  - Chlamydia diagnoses decreased by 4%, whilst testing increased by 6%.
  - New diagnoses of HIV have increased from 32 to 43 cases across the two periods. HIV testing has increased by 5%.
  - Reports of first episodes of warts decreased by 6% whilst reports of first episodes of herpes increased by 10%.
  - First diagnoses of hepatitis B decreased from 8 to 6 cases.
  - Hepatitis C diagnoses decreased from 16 to 12 cases.
  - Five cases of LGV were reported for the second period. Four have been laboratory confirmed.
  - Increases in gonorrhoea and new diagnosis of HIV was only seen in males (15% and 67%, respectively) (Table 2).
  - In men who have sex with men (MSM), new diagnoses of HIV increased by 85%, accounting for most of the increase in the male population. An increase in first episode of herpes was only seen in males not reporting as MSM.
  - Amongst 15-24 year olds, some trends differed to those in the general population. Both gonorrhoea and new diagnoses of HIV fell in this group, whilst cases of syphilis increased from 9 to 20 cases across the two periods (Table 3).
  - Health board (HB) trends should be interpreted with caution, as completeness of data varies between clinics and health boards.
  - The latest available trends indicate that compared to the same period for the previous year, chlamydia is increasing in Betsi Cadwaladr University and Cardiff and Vale University and Powys teaching health boards. Syphilis has fallen or remained stable in all healthboards apart from Abertawe Bro Morgannwg University and Hywel Dda University health boards. Diagnosis of gonorrhoea has increased across four out of seven Welsh HBs between the periods compared.
  - Completeness of diagnostic reporting has fallen recently, so data from Q2 2018 should be interpreted with caution.
  - In July 2017, Integrated Sexual Health clinics began prescribing Pre-exposure prophylaxis (PrEP) medication to patients at risk of HIV infection. This may have altered the cohort attending the clinics for STI screening and diagnoses.

General population

Table 1. Percentage change in selected diagnoses and screens made in ISH clinics from Q1 2017- Q2 2017 to Q1 2018-Q2 2018 in Wales

	Diagnoses			Screens		
	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change
Chlamydia	3230	3099	-4%	32391	34331	6%
Warts (1st episode)	1452	1364	-6%	-	-	-
Herpes (1st episode)	662	725	10%	-	-	-
Gonorrhoea	566	601	6%	32374	34314	6%
HIV (new diagnosis)	32	43	34%	17365	18193	5%
Syphilis	106	93	-12%	16988	17861	5%
LGV	0	5	-	-	-	-
Hepatitis A (acute)	0	0	-	-	-	-
Hepatitis B (1st diagnosis)	8	6	-25%	-	-	-
Hepatitis C (1st diagnosis)	16	12	-25%	-	-	-

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) The following KC60/SHHAPT diagnoses codes were used: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14).
v) Screen codes are collected only for chlamydia, gonorrhoea, HIV and syphilis. The following KC60/SHHAPT services codes were used: chlamydia tests (S1,S2,T1,T2,T3,T4), gonorrhoea tests (S1,S2,T2,T3,T4), HIV antibody tests (S2,T4,T7,P1A), syphilis tests (S1,S2,T3,T4,T7).

Gender and sexuality

Table 2. Percentage change in selected diagnoses made in ISH clinics from Q1 2017- Q2 2017 to Q1 2018-Q2 2018 by gender and sexuality in Wales

	Q1 2017-Q2 2017			Q1 2018-Q2 2018			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1422	161	1808	1364	202	1735	-4%	25%	-4%
Warts (1st episode)	771	59	681	752	42	612	-2%	-29%	-10%
Herpes (1st episode)	226	19	436	245	15	480	8%	-21%	10%
Gonorrhoea	369	212	197	426	258	175	15%	22%	-11%
HIV (new diagnosis)	24	13	8	40	24	3	67%	85%	-63%
Syphilis	95	75	11	82	61	11	-14%	-19%	0%
LGV	0	0	0	5	3	0	-	-	-
Hepatitis A (acute)	0	0	0	0	0	0	-	-	-
Hepatitis B (1st diagnosis)	4	0	4	5	0	1	25%	-	-75%
Hepatitis C (1st diagnosis)	9	3	7	8	2	4	-11%	-	-43%

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iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) The following KC60/SHHAPT diagnoses codes were used: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14).
v) Small numbers with potential for indirect disclosure of person identifiable information (*).

Young people (15-24 year olds)

Table 3. Percentage change in selected diagnoses made in ISH clinics Q1 2017- Q2 2017 to Q1 2018-Q2 2018 in 15-24 year olds in Wales

15-24 year olds	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change	% Change in screens
Chlamydia	2313	2144	-7%	5%
Warts (1st episode)	793	713	-10%	-
Herpes (1st episode)	319	357	12%	-
Gonorrhoea	289	262	-9%	5%
HIV (new diagnosis)	4	1	-75%	1%
Syphilis	9	20	122%	1%
LGV	0	0	-	-
Hepatitis A (acute)	0	0	-	-
Hepatitis B (1st diagnosis)	1	0	-100%	-
Hepatitis C (1st diagnosis)	1	1	0%	-

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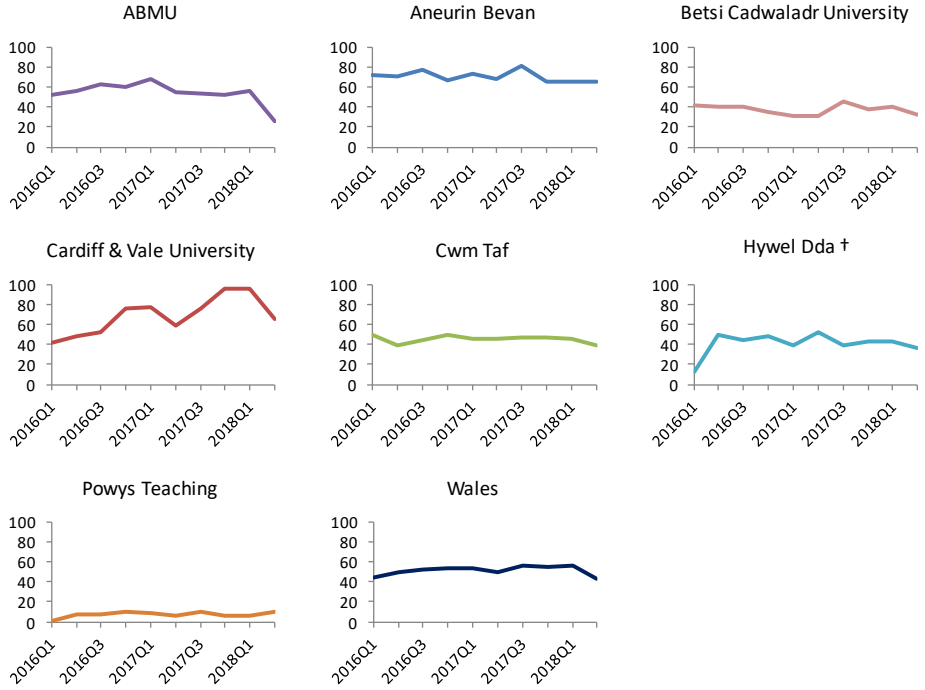
Chlamydia

Table 4. Percentage change in chlamydia diagnoses made in ISH clinics from Q1 2017- Q2 2017 to Q1 2018-Q2 2018, by LHB of residence, gender and sexuality

LHB	Group	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change
Abertawe Bro Morgannwg University	Female	371	274	-26%
	Male*	279	166	-41%
	*of which MSM	23	12	-48%
	Total	650	440	-32%
Aneurin Bevan	Female	478	450	-6%
	Male*	353	319	-10%
	*of which MSM	50	56	12%
	Total	831	769	-7%
Betsi Cadwaladr University	Female	236	280	19%
	Male*	204	232	14%
	*of which MSM	14	17	21%
	Total	440	512	16%
Cardiff & Vale University	Female	383	410	7%
	Male*	288	386	34%
	*of which MSM	55	92	67%
	Total	671	796	19%
Cwm Taf	Female	135	121	-10%
	Male*	135	135	0%
	*of which MSM	*	*	*
	Total	270	256	-5%
Hywel Dda†	Female	195	192	-2%
	Male*	154	113	-27%
	*of which MSM	12	14	17%
	Total	349	305	-13%
Powys Teaching	Female	10	8	-20%
	Male*	9	13	44%
	*of which MSM	*	*	*
	Total	19	21	11%
All Wales	Female	1808	1735	-4%
	Male*	1422	1364	-4%
	*of which MSM	161	202	25%
	Total	3230	3099	-4%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) The following KC60/SHHAPT codes were used: gonorrhoea (C4, C4A, C4C).
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 1. Chlamydia diagnoses in ISH clinics per 100,000 population, from Q1 2016 to Q2 2018, by LHB of residence



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ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
vi) The following KC60/SHHAPT codes were used: chlamydia (C4, C4A, C4C).

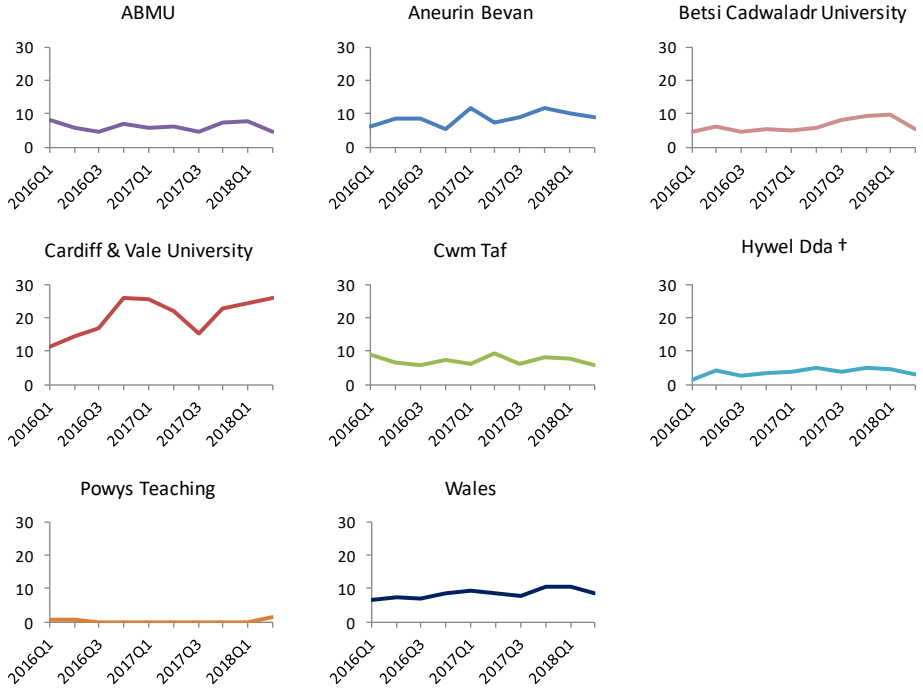
Gonorrhoea

Table 5. Percentage change in gonorrhoea diagnoses made in ISH clinics from Q1 2017- Q2 2017 to Q1 2018-Q2 2018, by LHB of residence, gender and sexuality

LHB	Group	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change
Abertawe Bro Morgannwg University	Female	25	15	-40%
	Male*	38	51	34%
	*of which MSM	16	25	56%
	Total	63	66	5%
Aneurin Bevan	Female	37	30	-19%
	Male*	75	81	8%
	*of which MSM	45	56	24%
	Total	112	111	-1%
Betsi Cadwaladr University	Female	33	52	58%
	Male*	44	52	18%
	*of which MSM	15	14	-7%
	Total	77	104	35%
Cardiff & Vale University	Female	77	54	-30%
	Male*	157	195	24%
	*of which MSM	109	145	33%
	Total	234	249	6%
Cwm Taf	Female	13	13	0%
	Male*	33	27	-18%
	*of which MSM	*	*	*
	Total	46	40	-13%
Hywel Dda†	Female	12	10	-17%
	Male*	22	19	-14%
	*of which MSM	14	10	-29%
	Total	34	29	-15%
Powys Teaching	Female	0	1	-
	Male*	0	1	-
	*of which MSM	*	*	*
	Total	0	2	-
All Wales	Female	197	175	-11%
	Male*	369	426	15%
	*of which MSM	212	258	22%
	Total	566	601	6%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 2. Gonorrhoea diagnoses in ISH clinics per 100,000 population, Q1 2016 to Q2 2018, by LHB of residence



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ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
vi) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).

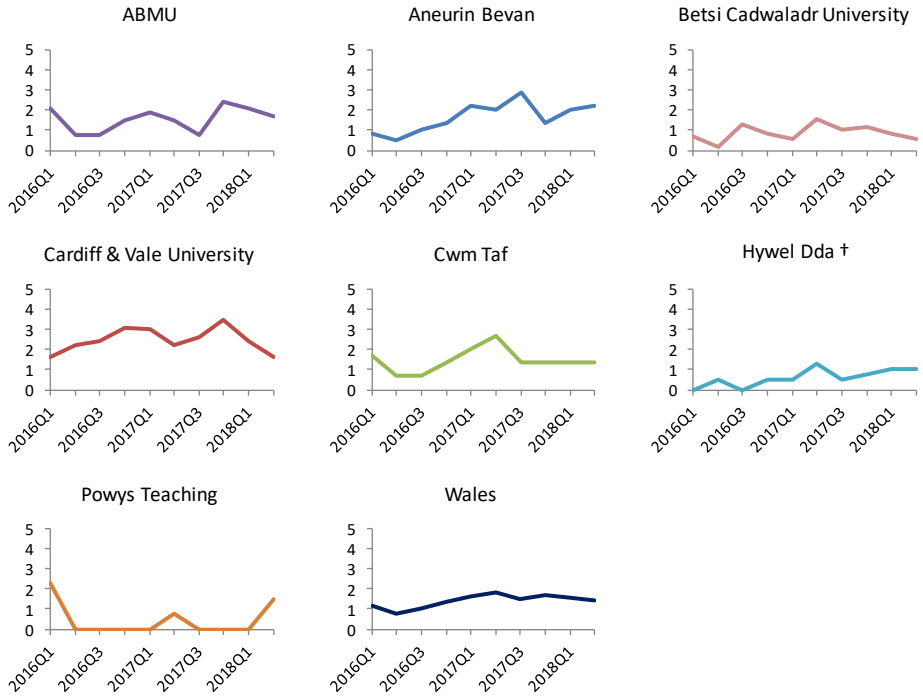
Syphilis

Table 6. Percentage change in syphilis diagnoses made in ISH clinics from Q1 2017- Q2 2017 to Q1 2018- Q2 2018, by LHB of residence, gender and sexuality

LHB	Group	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change
Abertawe Bro Morgannwg University	Female	2	2	0%
	Male*	16	18	13%
	*of which MSM	7	12	71%
	Total	18	20	11%
Aneurin Bevan	Female	0	1	-
	Male*	25	24	-4%
	*of which MSM	22	20	-9%
	Total	25	25	0%
Betsi Cadwaladr University	Female	0	2	-
	Male*	15	8	-47%
	*of which MSM	12	4	-67%
	Total	15	10	-33%
Cardiff & Vale University	Female	0	2	-
	Male*	26	18	-31%
	*of which MSM	25	16	-36%
	Total	26	20	-23%
Cwm Taf	Female	6	1	-83%
	Male*	8	7	-13%
	*of which MSM	6	5	-17%
	Total	14	8	-43%
Hywel Dda†	Female	3	3	0%
	Male*	4	5	25%
	*of which MSM	*	*	*
	Total	7	8	14%
Powys Teaching	Female	0	0	-
	Male*	1	2	100%
	*of which MSM	*	*	*
	Total	1	2	100%
All Wales	Female	11	11	0%
	Male*	95	82	-14%
	*of which MSM	75	61	-19%
	Total	106	93	-12%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) The following KC60/SHHAPT codes were used: primary, secondary and early latent syphilis (A1, A2, A3).
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 3. Syphilis diagnoses in ISH clinics per 100,000 population, from Q1 2016 to Q2 2018, by LHB of residence



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ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC.
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.
v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
vi) The following KC60/SHHAPT codes were used: primary, secondary and early latent syphilis (A1, A2, A3).

Appendix A: Data completeness

Key points

- The percentage of new and rebook attendances with at least one code (SHHAPT, SRHAD, KC60, or local code) was 74% and 78% respectively for the two periods compared (Q1 2017-Q2 2017and Q1 2018- Q2 2018).
- Health board trends should be taken with caution, as completeness of data varies between clinics and health boards.
- Please note that some data is missing for attendances in June 2018 to clinics based in Abertawe Bro Morgannwg University health board.
- Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016. Following this change, the number of clinics reporting from Hywel Dda health board has increased from 2 clinics at the beginning of 2016, to 10 clinics in Q1-Q2 2017.

Unmapped attendances

When SWS receives attendances with unrecognised codes, these attendances are not accepted into the system and are stored in "holding tables". CDSC is working to map as many of these codes as possible. At the time of this report, there were 132 unmapped attendances with attendance date before the end of June 2018.

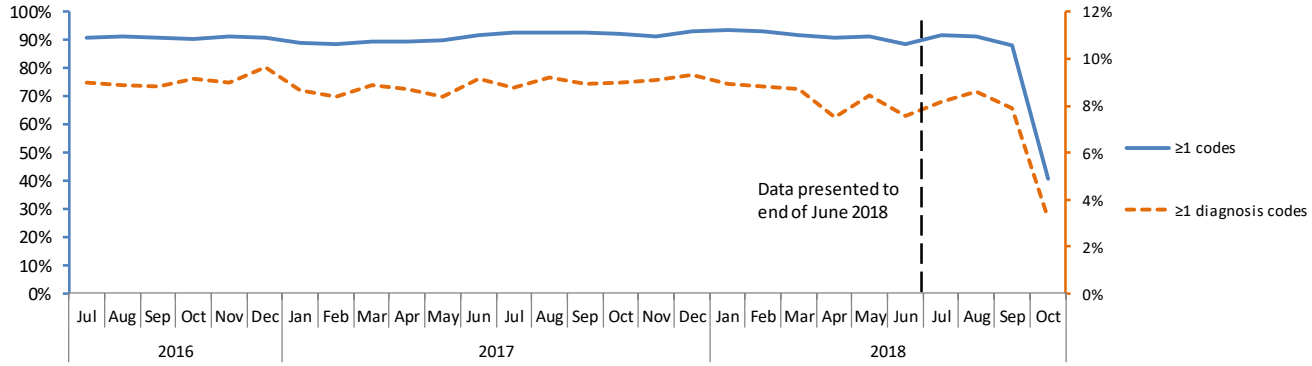
Coding completeness

Attendances which are received in SWS may or may not have diagnosis or service codes associated with them, as most of the time there is a lag between the attendance and the diagnosis or service codes being introduced in the system.

As there are codes to report "no service and/or treatment required" and "other conditions requiring treatment", in time, virtually all new patient and rebook patient attendances should have at least one code (rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care). We use the percentage of these attendances with at least one code as an indicator to estimate the completeness of the data received.

Another indicator is the percentage of new patient and rebook patient attendances with at least one diagnosis code. Not all attendances need to have a diagnosis code. However, this indicator can help detect a decrease in sensitivity in recent weeks due to the time lag between the attendance and the diagnosis codes being sent to SWS (Figure 1A). This time lag can be longer for diagnoses than for services, as service codes are often recorded on the attendance date.

Figure A1. Percentage of new and rebook attendances with at least one diagnosis/ service code (of any kind), and percentage with at least one diagnosis code*, from Q1 2016 to Q2 2018, Wales



i) Only new patient and rebook patient attendances reported to SWS clinic are included. Rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care.
ii) * Including KC60/SHHAPT diagnoses codes for: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14). iii) Missing values for new and rebook patient attendances in November and December 2016 were replaced by a 3-month rolling average for one clinic group

Table A1. Number of new and rebook attendances and percentage with at least one diagnosis/ service code (of any kind) by clinic, Q1 2017- Q2 2017 to Q1 2018-Q2 2018, Wales

Clinic	Q1 2017-Q2 2017		Q1 2018-Q2 2018	
	Number	% with ≥1 codes	Number	% with ≥1 codes
6	285	99%	217	98%
30	2006	99%	1609	98%
5	7746	98%	7036	97%
27	346	98%	256	96%
10	15576	100%	16469	100%
28	3741	100%	4005	100%
14	810	89%	856	84%
33	540	79%	501	75%
34	129	88%	59	95%
35	234	91%	176	88%
12	235	77%	187	57%
1	126	73%	137	74%
15	191	91%	171	89%
36	203	92%	141	82%
13	1082	93%	1220	90%
22	1264	96%	1064	90%
25	851	70%	762	85%
29	535	85%	779	93%
23	688	93%	674	96%
24	245	97%	303	92%
11	1508	97%	1543	99%
9	10350	82%	10830	94%
7	667	95%	698	96%
43	30	93%	5	80%
37	969	89%	1039	98%
38	78	88%	38	89%
39	266	82%	225	97%
8	714	90%	236	97%
31	1947	95%	2035	96%
40	15	100%	6	67%
44	18	94%	18	100%
26	2236	87%	3061	86%
41	78	86%	67	87%
42	305	98%	372	98%
46	13	92%	2	0%
47	4	50%	5	40%
32	704	93%	760	96%
51	42	40%	246	64%
2	823	60%	1052	70%
48	18	0%	13	0%
20	549	49%	659	59%
19	851	53%	987	55%
3	1142	56%	1239	65%
4	320	82%	349	71%
17	2020	59%	2485	58%
16	1026	69%	1176	82%
50	841	78%	1058	90%
52	0	-	47	98%
Wales	**64367**	**74%**	**66873**	**78%**

i) Diagnoses made in new patient and rebook patient attendances reported to SWS clinic. Rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care.
ii) Green: >=90% attendances with at least one code; Orange: >=80% and <90% attendances with at least one code; Red: <80% attendances with at least one code; Grey: Not in service.
iii) Some clinics are reporting sexual and reproductive health through the SWS-STI system using the new patient and rebook patient attendance types, and therefore attendance numbers are not always comparable across clinics.

Appendix B: Episode periods

Table B1: Episode periods within which KC60/SHHAPT codes are deduplicated

KC60/SHHAPT Code and description		Episode period	Further cleaning
A1	Primary infectious syphilis	42 days	42 days between A1 and A3
A2	Secondary infectious syphilis	182 days	42 days between A2 and A3
A3	Early latent syphilis	728 days	42 days between A1 or A2 and A3
B, B1, B2	Gonorrhoea (SHHAPT) / Uncomplicated gonorrhoea infection	42 days	-
C2	LGV	42 days	-
C4, C4A, C4C	Chlamydia (SHHAPT) / Uncomplicated chlamydial infection	42 days	-
C10A	Anogenital herpes simplex - first attack	Patient's lifetime	Subsequent episodes replaced by recurrence code
C11A	Anogenital warts - first attack	Patient's lifetime	Subsequent episodes replaced by recurrence code
C13, C13A, C13B	Hepatitis B – 1st diagnosis	Patient's lifetime	-
C14	Viral hepatitis C: first diagnosis	Patient's lifetime	-
C15	Viral Hepatitis A: Acute Infection	Patient's lifetime	-
E1A	New HIV diagnosis: asymptomatic	Patient's lifetime	Only one code new HIV diagnosis code
E2A	New HIV diagnosis: symptomatic (not AIDS)	Patient's lifetime	Only one code new HIV diagnosis code
E3A1	AIDS: first presentation - new HIV diagnosis	Patient's lifetime	Only one code new HIV diagnosis code
H1	New HIV diagnosis	Patient's lifetime	Only one code new HIV diagnosis code
H1A	New HIV diagnosis: Acute	Patient's lifetime	Only one code new HIV diagnosis code
H1B	New HIV diagnosis: Late	Patient's lifetime	Only one code new HIV diagnosis code
P1A	HIV antibody test (no sexual health screen)	42 days	-
S1	Sexual health screen (no HIV antibody test)	42 days	-
S2	HIV antibody test and sexual health screen	42 days	-
T1	Chlamydia test	42 days	-
T2	Chlamydia and gonorrhoea tests	42 days	-
T3	Chlamydia, gonorrhoea and syphilis tests	42 days	-
T4	Full sexual health screen including HIV antibody test	42 days	-
T7	Syphilis & HIV test	42 days	-